

Application Number 09/826,901

Responsive to the Final Office Action of September 9, 2004

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Previously Presented): A multilayer magnetic recording medium which comprises, on a nonmagnetic substrate, at least one upper binder-containing magnetic recording layer which has a thickness of less than 0.5 μm and contains finely divided magnetic pigment having a coercive force H_c of 100-250 kA/m, at least one lower binder-containing layer which contains an isotropic magnetically soft pigment which is selected from $\gamma\text{-Fe}_2\text{O}_3$, Fe_3O_4 or a solid solution of these components and has a mean crystallite size of less than 10 nm, and the lower layer has a coercive force H_c of less than 0.7 kA/m.

Claim 2 (Original) A magnetic recording medium as claimed in claim 1, wherein the coercive force H_c of the pigment in the upper layer is from 130 to 220 kA/m.

Claim 3 (Original) A magnetic recording medium as claimed in claim 1, wherein the magnetic pigment in the upper layer is a metal pigment or metal alloy pigment.

Claim 4 (Original) A magnetic recording medium as claimed in claim 1, wherein the magnetic pigment in the upper layer is a hexagonal ferrite pigment or a Co-modified $\gamma\text{-Fe}_2\text{O}_3$, Co-modified Fe_3O_4 or a solid solution of these components.

Claim 5 (Original) A magnetic recording medium as claimed in claim 1, wherein the isotropic magnetically soft pigment in the lower layer has a mean crystallite size of less than 6 nm.

Claim 6 (Canceled)

Claim 7 (Original) A magnetic recording medium as claimed in claim 1, wherein the lower layer has a coercive force H_c of less than 0.3 kA/m.

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Claim 8 (Original) A magnetic recording medium as claimed in claim 1, wherein the amount of the magnetically soft pigment in the lower layer is from 25 to 85% by weight, based on the weight of all pigments in the lower layer.

Claim 9 (Original) A magnetic recording medium as claimed in claim 1, wherein the amount of the magnetically soft pigment in the lower layer is from 35 to 78% by weight, based on the weight of all pigments in the lower layer.

Claim 10 (Original) A magnetic recording medium as claimed in claim 1, wherein the magnetically soft pigment in the lower layer has been surface-treated with an aluminum compound or a silicon compound or a mixture of the two compounds.

Claim 11 (Original) A magnetic recording medium as claimed in claim 1, wherein the magnetically soft pigment in the lower layer is spherical or amorphous.

Claim 12 (Original) A magnetic recording medium as claimed in claim 1, wherein the lower layer contains at least one nonmagnetic pigment in addition to the magnetically soft pigment.

Claim 13 (Original) A magnetic recording medium as claimed in claim 12, wherein the nonmagnetic pigment is acicular, having a mean longitudinal axis of from 5 to 200 nm, or spherical or amorphous, having a mean particle size of from 5 to 180 nm.

Claim 14 (Original) A magnetic recording medium as claimed in claim 12, wherein the nonmagnetic pigment is $\alpha\text{-Fe}_2\text{O}_3$.

Claim 15 (Original) A magnetic recording medium as claimed in claim 12, wherein the nonmagnetic pigment is carbon black.

Claim 16 (Original) A magnetic recording medium as claimed in claim 12, wherein the nonmagnetic pigment is a mixture of carbon black and $\alpha\text{-Fe}_2\text{O}_3$.

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Claim 17 (Canceled)

Claim 18 (Previously presented) A magnetic recording medium containing an upper layer, and a lower layer, said lower layer including magnetically soft pigment which is selected from $\gamma\text{-Fe}_2\text{O}_3$, Fe_3O_4 and a solid solution of these components and has a mean crystallite size of less than 10 nm, and a coercive force H_c of less than 0.7 kA/m.

Claim 19 (Original) The magnetic recording medium as claimed in claim 18, wherein the magnetically soft pigment has a mean crystallite size of less than 6 nm as a pigment in a lower layer of a magnetic recording medium.

Claim 20 (Canceled)

Claim 21 (Previously presented) A magnetic tape, magnetic card or floppy disk comprising a multilayer magnetic recording medium which comprises, on a nonmagnetic substrate, at least one upper binder-containing magnetic recording layer which has a thickness of less than 0.5 μm and contains a finely divided magnetic pigment having a coercive force H_c of 100 – 250 kA/m, and at least one lower binder-containing layer which contains an isotropic magnetically soft pigment which is selected from $\gamma\text{-Fe}_2\text{O}_3$, Fe_3O_4 , or a solid solution of these components and has a mean crystallite size of less than 10 nm, and the lower layer has a coercive force H_c of less than 0.7 kA/m.

Claim 22 (Previously presented) The magnetic recording medium as claimed in claim 1, wherein the isotropic magnetically soft pigment has a specific surface area determined on the basis of BET method is more than 100 m^2/g .

Claim 23 (Previously presented) The magnetic recording medium as claimed in claim 22, wherein the isotropic magnetically soft pigment has a specific surface area determined on the basis of BET method is more than 120 m^2/g .

Claim 24 (Canceled)

Claim 25 (Canceled)

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Claim 26 (Previously presented) The magnetic recording medium as claimed in claim 18, wherein the isotropic magnetically soft pigment has a specific surface area determined on the basis of BET method is more than $100 \text{ m}^2/\text{g}$.

Claim 27 (Previously presented) The magnetic recording medium as claimed in claim 26, wherein the isotropic magnetically soft pigment has a specific surface area determined on the basis of BET method is more than $120 \text{ m}^2/\text{g}$.

Claim 28 (Canceled)

Claim 29 (Canceled)

Claim 30 (Previously presented) The magnetic recording medium as claimed in claim 18, wherein the lower layer has a coercive force H_c of less than 0.3 kA/m .

Claim 31 (Canceled)

Claim 32 (Canceled)

Claim 33 (Canceled)

Claim 34 (Previously presented) The magnetic recording medium as claimed in claim 21, wherein the lower layer has a coercive force H_c of less than 0.3 kA/m .